CLAIMS

1. A method for interconnecting a plurality of dies comprising the steps of:

(A) receiving a plurality of interconnect requirements for said dies;

(B) calculating a position and an angle for one of said dies relative to a substrate in response to said interconnect requirements; and

(C) routing a plurality of nets among said dies and a plurality of substrate pads.

2. The method according to claim 1, wherein said interconnect requirements comprise a priority for each of said nets.

3. The method according to claim 2, wherein step (C) further comprises the sub-step of routing said nets one at a time in descending order of said priority.

4. The method according to claim 3, further comprising the step of changing one of said angles in response to a target net

of said nets having a shortest possible length requirement of said interconnect requirements.

5. The method according to claim 4, further comprising the step of changing one of said positions in response to said target net having said shortest possible length requirement.

6. The method according to claim 1, further comprising the step of changing one of said angles in response to a target net of said nets failing to meet at least one of said interconnect requirements.

7. The method according to claim 6, further comprising the step of changing one of said positions in response to said target net failing to meet at least one of said interconnect requirements.

8. The method according to claim 1, wherein a trace group comprises at least two nets of said nets routed together.

9. The method according to claim 8, wherein said interconnect requirements comprise a maximum delay variation among said at least two nets of said trace group.

10. The method according to claim 1, wherein said interconnect requirements comprise at least one delay from a group of delays consisting of a shortest possible delay, a maximum delay, a range of delays, and a ratsnest delay.

11. A storage medium for use in a computer for interconnecting a plurality of dies, the storage medium recording a computer program that is readable and executable by the computer, the computer program comprising the steps of:

(A) receiving a plurality of interconnect requirements for said dies;

(B) calculating a position and an angle for one of said dies relative to a substrate in response to said interconnect requirements; and

(C) routing a plurality of nets among said dies and a plurality of substrate pads.

12. The storage medium according to claim 11, wherein said interconnect requirements comprise a priority for each of said nets.

13. The storage medium according to claim 12, wherein step (C) further comprises the sub-step of routing said nets one at a time in descending order of said priority.

14. The storage medium according to claim 13, further comprising the step of changing one of said angles in response to a target net of said nets having a shortest possible length requirement of said interconnect requirements.

15. The storage medium according to claim 14, further comprising the step of changing one of said positions in response to said target net having said shortest possible length requirement.

16. The storage medium according to claim 11, further comprising the step of changing one of said angles in response to

a target net of said nets failing to meet at least one of said interconnect requirements.

17. The storage medium according to claim 16, further comprising the step of changing one of said positions in response to said target net failing to meet at least one of said interconnect requirements.

18. The storage medium according to claim 11, wherein a trace group comprises at least two nets of said nets routed together.

19. The storage medium according to claim 18, wherein said interconnect requirements comprise a maximum delay variation among said at least two nets of said trace group.

20. An apparatus comprising:

means for receiving a plurality of interconnect requirements for a plurality of dies;

means for calculating a position and an angle for one of said dies relative to a substrate in response to said interconnect requirements; and

means for routing a plurality of nets among said dies and a plurality of substrate pads.